

Title (en)
AN ACTIVE CANNULA FOR BIO-SENSING AND SURGICAL INTERVENTION

Title (de)
AKTIVKANÜLE ZUR BIOMESSUNG UND FÜR CHIRURGISCHE INTERVENTIONEN

Title (fr)
CATHETER ACTIF POUR BIODETECTION ET INTERVENTION CHIRURGICALE

Publication
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Application
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Abstract (en)
[origin: WO2007059233A2] Disclosed is a surgical needle, or active cannula, that is capable of following a complex path through cavities and tissue within a patient's anatomy. The needle has a plurality of overlapping flexible tubes, each of which has a pre-formed curvature and a pre-determined flexibility. Each of the plurality of flexible tubes is selected based on their respective pre-formed curvature and flexibility so that a given overlap configuration causes the combination of overlapping flexible tubes to form a predetermined shape that substantially matches a desired path through the anatomy. By individually controlling the translation and angular orientation of each of the flexible tubes, the surgical needle may be guided through the anatomy according to the desired path.

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